

ADMINISTRATIVE APPEAL DECISION
ROGER KEIL/GREEN ISLAND LEVEE AND DRAINAGE DISTRICT #1
JURISDICTIONAL DETERMINATION
FILE NO. CEMVR-OP-P-2011-0066
ROCK ISLAND DISTRICT
NOVEMBER 4, 2011

Review Officer: James B. Wiseman, Jr., U.S. Army Corps of Engineers, Mississippi Valley Division (MVD)

Appellant: Roger Keil, Green Island Levee and Drainage District #1

Authority: Section 404, Clean Water Act

Receipt of Acceptable Request for Appeal: 19 July 2011

Approved Jurisdictional Determination Appeal Teleconference:
6 October 2011

Summary of Appeal Decision: The approved jurisdictional determination (JD) dated May 20, 2011, is remanded to MVR for reconsideration based on comments detailed in this document. One of the Mr. Keil's reasons for appeal was found to have merit. In addition, parts of the administrative record need further analysis and clarification. The final Corps decision will be the Rock Island District Engineer's decision made pursuant to the remand.

Background Information: Mr. Roger Keil, on behalf of Green Island Levee and Drainage District #1, Jackson County, Iowa, applied for a Department of the Army permit to repair two levee breaks, both on the right descending bank of the Maquoketa River: (1) Station 90 - 230 foot break near Highway 52, and (2) Station 40 - 225 foot break about 1.5 miles upstream of Station 90. This appeal only involves the Station 90 break. Keil proposed to use a 6.4 acre borrow area to obtain the fill material for the levee repair. A map of the proposed borrow area may be found in the administrative record at page 35 (AR-35). On April 7, 2011, representatives from MVR and the Natural Resources Conservation Service (NRCS) conducted a field investigation on the proposed borrow site to determine if it contains jurisdictional wetlands subject to regulation under Section 404 of the Clean Water Act. The entire site was determined to be jurisdictional wetlands. On May 20, 2011,

along with a nationwide permit authorization,¹ MVR issued a JD to Mr. Keil and to Mr. Larry Koos of the Jackson County Board of Supervisors (AR-31). Mr. Keil objected to this JD and submitted a request for appeal (RFA) to MVD on June 29, 2011. By letter dated July 1, 2011, MVD requested additional information and clarification of the RFA. Mr. Keil's response was received by MVD on July 18, 2011. A letter informing Mr. Keil that the RFA had been accepted by MVD was sent on July 26, 2011.

Information Received and its Disposal During the Appeal:

33 C.F.R. § 331.3(a)(2) sets the authority of the Division Engineer to hear the appeal of this jurisdictional determination. However, the Division Engineer does not have authority under the appeal process to make a final decision regarding jurisdictional determinations, as that authority remains with the District Engineer. Upon appeal of the District Engineer's determination, the Division Engineer or his Review Officer (RO) conducts an independent review of the administrative record to address the reasons for appeal cited by the Appellant. The administrative record is limited to information contained in the record by the date of the Notification of Administrative Appeal Options and Process (NAO/NAP) form. Pursuant to 33 C.F.R. § 331.2, no new information may be submitted on appeal. Neither the Appellant nor the District may present new information to MVD. To assist the Division Engineer in making a decision on the appeal, the RO may allow the parties to interpret, clarify, or explain issues and information already contained in the administrative record. Such interpretation, clarification, or explanation does not become part of the administrative record, because the District Engineer did not consider it in making the decision on the JD. However, in accordance with 33 C.F.R. § 331.7(f), the Division Engineer may use such interpretation, clarification, or explanation in determining whether the administrative record provides an adequate and reasonable basis to support the District Engineer's decision.

1. MVR provided a copy of the Administrative Record (AR) to the RO, and to the Appellant. The RO received his copy on June 29, 2011. The AR is limited to information contained in the record by the date of the NAO/NAP form. In this case, that date is May 20, 2011.

¹ Nationwide Permit Number 3 (Maintenance) with three special conditions including a condition that limits the source of the fill material for the levee repair to an upland non-wetland site.

2. A teleconference to review the administrative record was held on October 6, 2011. The RO prepared an agenda for the teleconference and provided a copy to Mr. Keil and MVR. Included with the agenda was a list of questions for MVR that the RO intended to discuss during the teleconference in order to clarify the administrative record. The RO prepared a Memorandum for Record (MFR) summarizing the teleconference. MVR prepared written responses to the agenda questions and provided a copy to the RO (received on October 18, 2011). A copy of the MFR, including the MVR written responses to the agenda questions, may be found in Appendix A.

Appellant's Reasons for Appeal

1. The soil on the site is not hydric. It is sandy, does not hold water, and is 10 feet above the water table of the Maquoketa River.

FINDING: This reason for appeal has partial merit.

DISCUSSION: MVR conducted a field investigation of the 6.4-acre proposed borrow area on April 7, 2011. A total of five sample sites (AR-86) were documented. Wetland determination data forms (AR-76 to AR-85) indicate that all five sites were determined to have hydrophytic vegetation, hydric soils, and wetland hydrology. The appellant disputes the presence of hydric soils in the proposed borrow area.

According to standard methodology, a particular soil sample is hydric if it meets one of the hydric soil field indicators found in *Field Indicators of Hydric Soils in the United States*² (Hydric Soil Manual). For each of the sample sites, MVR determined that the soils meet the F6 (Redox Dark Surface) hydric soil indicator. According to the Hydric Soil Manual, in order to meet the F6 indicator, the soil must have a layer that is at least 4 inches thick and have (1) matrix value of 3 or less, chroma of 1 or less, and 2% or more distinct or prominent redox concentrations occurring as soft masses or pore linings, or (2) matrix value of 3 or less, chroma of 2 or less, and 5% or more distinct or prominent redox concentrations occurring as soft masses or pore linings.

² United States Department of Agriculture, Natural Resources Conservation Service. 2010. *Field Indicators of Hydric Soils in the United States, Version 7.0*. L.M. Vasilas, G.W. Hurt, and C.V. Noble (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

The following table summarizes the soil data collected at each of the five sample sites:

Sample #	Depth (in.)	Matrix Color	Redox Features				Texture
			Color	%	Type	Loc.	
1	0-8	10 YR 4/4					Sand
	8-30	10 YR 3/2	7.5 YR 4/3	2	Conc.*	PL	Sandy Loam
			10 YR 2/1	1	Conc.	PL	Sandy Loam
2	0-18	10 YR 3/2	7.5 YR 4/3	2	Conc.	PL	Sandy Loam
3	0-18	10 YR 3/2	7.5 YR 4/3	5	Conc.	PL	Sandy Loam
			10 YR 2/1	1	Conc.	PL	Sandy Loam
4	0-18	10 YR 3/2	7.5 YR 4/3	2	Conc.	PL	Sandy Loam
5	0-18	10 YR 3/2	7.5 YR 4/3	5	Conc.	PL	Sandy Loam
			10 YR 2/1	1	Conc.	PL	Sandy Loam

Conc=Concentration Loc=Location PL=Pore Linings

Under the provisions of the appeal regulations at 33 CFR §331.3(b)(2), the RO contacted Mr. Chris Noble, Corps lead soil scientist for development of the regional wetland delineation manuals and co-editor of the Hydric Soil Manual, for his assistance in analysis of the soil samples.³ According to Mr. Noble, sample #1 does not meet the general caveat for all soils with loamy/clayey features.⁴ Samples #1, #2, and #4 do not meet the F6 requirement of having 5% redox features. Only 2% redox features are documented for each of these three samples. Of the five samples, Mr. Noble concluded that only samples #3 and #5 likely meet the F6 indicator.

The issue of the F6 indicator was included as #4 in a list of questions provided to MVR prior to the appeal teleconference and was discussed during the teleconference. In a written response to the question, MVR conceded that the record did not support F6 for samples #1, #2, and #4. However, MVR asserted that "the special conditions found at the sampling points should have been used to support our findings." MVR further stated that the sampling sites in question "are wetlands, although and not because they meet NRCS F6 criteria, rather because they are made up of fluvial sediments within the floodplain." However, none of the evidence referred to by MVR, whether correctly interpreted or not, is provided in the administrative record. The data forms simply indicate, in all cases, that soils meet the F6 hydric soil indicator, which is clearly in error for samples #1, #2, and #4.

ACTION: MVR shall correct the administrative record to reflect the fact that the soils in samples #1, #2, and #4 do not meet

³ Chris V. Noble. U.S. Army Corps of Engineers Engineering Research and Development Center, Vicksburg, MS. Personal communication.

⁴ USDA, NRCS. p. 20.

the F6 hydric soil indicator. If MVR has determined that other indicators and/or factors support a determination that soils on the site are hydric, that conclusion must be fully supported in the administrative record. If the record does not support the occurrence of hydric soils on the site, this should be fully documented in the AR, and the JD should be revised accordingly.

2. According to Iowa law, wetlands must contain plants such as sedges, bulrushes, spike rushes, cattails, arrowheads, and smart weeds and have a steady source of water. This site has none of the above.

FINDING: This reason for appeal does not have merit.

DISCUSSION: Iowa law is not used to assert federal jurisdiction over waters of the United States (including wetlands) under Section 404 of the Clean Water Act. The presence or absence of wetland vegetation, hydric soil, and wetland hydrology is determined using methodology found in the *Corps of Engineers Wetlands Delineation Manual*⁵ and the appropriate regional supplement.⁶ The MVR determination that the site has hydrophytic vegetation is fully supported in the record. The occurrence of hydric soils and wetland hydrology is addressed elsewhere in this document.

ACTION: No action is required.

Additional Analysis of the Administrative Record

Per regulation at 33 CFR § 331.3(3)(b)(2), in addition to the specific issues cited by the appellant, the RO, to the extent that it is practicable and feasible, will conduct an independent review of the administrative record to verify that the record provides an adequate and reasonable basis supporting the District Engineer's decision. After examination of the administrative record, the RO discovered what appear to be contradictory statements. These apparent contradictions were provided as written questions for MVR in the teleconference agenda.

⁵ Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

⁶ U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*.

1. "On the approved JD form (AR-13), it is stated that "The 6.4-acre forested wetland meets the definition of 'waters of the United States, adjacent, and adjacent,' according to 33 C.F.R. 328.3. It has hydric soils and mature wetland trees (approximately 50 years and older). Its position in the landscape and relationship with the Maquoketa River allow for a direct hydrologic connection and results in continuously saturated soil conditions." However, according to wetland determination data forms (AR-76 to AR-85), none of the five sample sites had saturated soils. Please explain this contradiction.

DISCUSSION: In its written response, MVR asserts that "The statement in the AR-13 should be corrected to state 'Its position in the landscape and relationship with the Maquoketa River allow for a direct hydrologic connection and demonstrates a continuing wetland hydrologic regime.'"

The administrative appeal process may not be used to correct misstatements in the record, since the appeal decision is based on the contents of the record as of the date of the Notification of Appeal form. This response appears to be an attempt by MVR to correct the record and is not supported by information or analysis. If any statement or finding in the record needs revision and/or correction, it should be made as part of a more thorough analysis under remand.

ACTION: During the remand, MVR shall provide further analysis of the lack of saturated soil conditions documented on the data forms. These statements are contrary to statements made on the approved JD form. Even though MVR found other evidence of wetland hydrology, this apparent contradiction involving soil saturation should be resolved.

2. "The data forms also show that the field work was conducted on April 7, 2011. Is this data within the growing season?"

3. "Could the date of the field work relative to the growing season have had any impact on the site conditions documented on the data forms?"

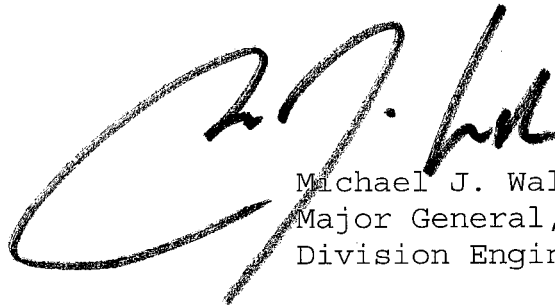
DISCUSSION: The above two questions are considered together. MVR responded that generally, the growing season in central Iowa lasts from April 26th until October 5th. MVR concluded that emergence of several perennial species (as evidenced in the photographic record at AR-59 to AR-75) is not sufficient to conclude that the growing season had begun on April 7, 2011.

In response to the 2nd question above, MVR stated that "we do not believe that the date of the field work relative to the growing season had any impact on the site conditions that would change our conclusions on the site."

MVR does not address the potential that sampling prior to the growing season would potentially increase the likelihood of saturated soil conditions, further drawing into question the apparent contradictions involving soil saturation noted above.

ACTION: In addressing the contradictions found in the record involving soil saturation, MVR should include an analysis of the likelihood that soil saturation should have greater on April 7, 2001, than on dates later in the growing season.

Conclusion: I find that one of the reasons for appeal cited by the Appellant has merit. The approved jurisdictional determination dated May 20, 2011, is remanded to MVR for reconsideration based on comments detailed above. The final Corps decision will be the Rock Island District Engineer's decision made pursuant to my remand.

A large, stylized handwritten signature in black ink, appearing to read "M.J. Walsh".

Michael J. Walsh
Major General, U.S. Army
Division Engineer

Appendix A

Appeal Teleconference

Memorandum for Record

MEMORANDUM FOR RECORD

SUBJECT: Jurisdictional Determination Appeal Teleconference
Rock Island District (MVR), Site in Jackson County, Iowa
Corps File Number, MVR-2011-2011-0066
Date of Teleconference: October 6, 2011

1. APPELLANT: Roger Keil/Green Island Levee and Drainage District #1
2. REVIEW OFFICER: James B. Wiseman, Jr., Ph.D., U.S. Army Corps of Engineers, Mississippi Valley Division (MVD)
3. ATTENDEES: Roger Keil – Appellant
Ward Lenz – MVR
Dan Hayes – MVR
Jim Wiseman – Review Officer, MVD
4. APPEAL TELECONFERENCE SUMMARY:
 - a) The conference convened at approximately 1:20 pm with each participant briefly introducing himself.
 - b) Opening statements:
 - Review Officer – The RO made some general statements about the appeal process, and stated that the teleconference would proceed according to the agenda which had previously been sent to Mr. Keil and MVR. See Appendix A for a copy of the agenda.
 - MVR – declined to make an opening statement
 - Mr. Keil – Mr. Keil expressed the concern that he was not getting the correct information from either MVR or the Natural Resources Conservation Service (NRCS), and that he feels like he is getting the “run around”.
 - c) Reasons for Appeal – The RO stated that as he understood the request for appeal submitted by Mr. Keil, there are two main reasons for appeal:
 - The proposed borrow site does not have hydric soil.
 - According to Iowa law, wetlands must contain must contain plants such as sedges, bulrushes, spike rushes, cattails, arrowheads, and smart weeds and have a steady source of water. This site has none of the above.
 - d) The RO sent a list of questions about the administrative record (AR) to MVR. These questions were included in the agenda (Appendix A). MVR provided verbal responses to the questions during the teleconference, and the responses were discussed. Subsequent to the teleconference, MVR provided more detailed written responses (Appendix B).

- Question #1 – MVR reaffirmed its conclusion that the site has saturated soils, but also noted that their statement needs to be re-worded. Mr. Keil disagreed and continued to assert that the area does not have saturated soils. Mr. Keil stated that if a wetland exists in this area, it is man-made since it was used as borrow area when the highway was built.
 - Question #2 – MVR stated that the time of the sample was not within the growing season, but that this did not impact the vegetation present.
 - Question #3 – MVR stated that the date of the field work had no effect on the final decision.
 - Question #4 – MVR agreed that designation of the F6 indicator for all sample sites was an error.
- e) Other Discussion
- MVR stated that Nationwide Permit #3 had already been issued for the site, but that the permit was conditioned such that any fill must be obtained from a non-wetland site.
 - The RO asked Mr. Keil if the entire 6.4 acre site would be needed to make the levee repairs. Mr. Keil responded that only about two acres would be needed.
- f) The RO thanked all for participating and the teleconference ended at approximately 2:30 pm.

James B. Wiseman, Jr.
Administrative Appeals Review Officer

Appendix A – Teleconference Agenda

**Roger Keil/Green Island Levee and Drainage District #1
Rock Island District, File # 2011-0066
Approved Jurisdictional Determination
Appeal Teleconference
October 6, 2011**

**Call In Number: 888-675-2535
Access Code: 4465034
Time: 1:00 pm**

Note: By regulation, this teleconference will not be recorded, and no verbatim transcript will be made. The Review Officer will take notes, produce a memorandum summarizing the meeting, and provide the memo to Mr. Keil and Rock Island District for review and comment.

Opening Statements

1. Review Officer
2. Mr. Keil (optional)
3. Rock Island District (optional)

Review of Administrative Record (brief overview of contents)

Appellant's Reasons for Appeal (as understood by the Review Officer)

1. The soil on the site is not hydraulic (hydric?). It is sandy, does not hold water, and is 10 feet above the water table of the Maquoketa River.
2. According to Iowa law, wetlands must contain plants such as sedges, bulrushes, spike rushes, cattails, arrowheads, and smart weeds and have a steady source of water. This site has none of the above.

Questions for Rock Island District about Administrative Record – The following questions will be discussed during the teleconference. The Corps may provide written responses to clarify their answers. This is a preliminary set of questions. The RO may have additional questions during the appeal meeting that are not listed here.

1. On the Approved JD Form (AR-13), it is stated that “The 6.4-acre forested wetland meets the definition of ‘waters of the United States,’ ‘wetlands,’ and ‘adjacent,’ according to 33 C.F.R. 328.3. It has hydric soils and mature wetland trees (approximately 50 years and older). Its position on the landscape and relationship with the Maquoketa River allow for a direct hydrologic connection and results in continuously saturated soil conditions.” However, according to wetland determination data forms (AR-76 to AR-85), none of the five sample sites had saturated soils. Please explain this contradiction.
2. The data forms also show that the field work was conducted on April 7, 2011. Is this date within the growing season?

Appendix A – Teleconference Agenda (continued)

3. Could the date of the field work relative to the growing season have had any impact on the site conditions documented on the data forms?
4. At all five sample points, the soil is determined to be hydric based on the presence of the F6 (Redox Dark Surface) hydric soil indicator. However, in F6 if the chroma is 2 or less, it must have 5% or more redox features. Samples #1, #2, and #4 only describe 2% redox, so these samples do not meet F6. Is there an explanation for this error?

Additional Discussion/Clarification of the Administrative Record

Final Statements or Comments

1. Mr. Keil (optional)
2. Rock Island District (optional)
3. Review Officer

Appendix B – MVR Responses to RO Questions



REPLY TO

DEPARTMENT OF THE ARMY
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS
CLOCK TOWER BUILDING - P.O. BOX 2004
ROCK ISLAND, ILLINOIS 61204-2004

<http://www.mvr.usace.army.mil>

October 12, 2011

Operations Division

SUBJECT: CEMVR-OD-P-2011-0066

✓ Mr. James B. Wiseman, Jr.
U.S. Army Corps of Engineers
Mississippi Valley Division
ATTN: CEMVD-PD-KM
Post Office Box 80
Vicksburg, Mississippi 39181-0080

Mr. Roger Keil
18857 Highway 52
Bellevue, IA 52031

Dear Mr. Weisman and M r. Keil:

Please find enclosed the District's response to the questions posed in the appeals conference held 6 October 2011. The questions and answers are as follows:

1. On the Approved JD Form (AR-13), it is stated that "The 6.4-acre forested wetland meets the definition of 'waters of the United States, wetlands, and adjacent,' according to 33 C.F.R. 328.3. It has hydric soils and mature wetland trees (approximately 50 years and older). Its position on the landscape and relationship with the Maquoketa River allow for a direct hydrologic connection and results in continuously saturated soil conditions." However, according to wetland determination data forms (AR-76 to AR-85), none of the five sample sites had saturated soils. Please explain this contradiction.

The statement in the AR-13 should be corrected to state "Its position on the landscape and relationship with the Maquoketa River allow for a direct hydrologic connection and demonstrates a continuing wetland hydrologic regime".

2. The data forms also show that the field work was conducted on April 7, 2011. Is this date within the growing season?

Generally, the growing season (time between the last spring frost and the first autumn frost) extends from April 26 to October 5 in central Iowa. It is about 15 days shorter along the Minnesota border and 20 days longer in the southeast.
(http://www.crh.noaa.gov/images/dvn/downloads/Clim_IA_01.pdf, retrieved on 3 October 2011). Specifically, the growing season has begun on a site in a given year when two or more

10-18-11 1410:57 RCVD

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different non-evergreen vascular plant species growing in the wetland or surrounding areas exhibit one or more of the following indicators of biological activity:

- a. Emergence of herbaceous plants from the ground
- b. Appearance of new growth from vegetative crowns (e.g., in graminoids, bulbs, and corms)
- c. Coleoptile/cotyledon emergence from seed.

(See Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) *U.S. Army Engineer Research and Development Center 3909 Halls Ferry Road Vicksburg, MS 39180-6199*, August 2010, pp. 72-73).

The plants that were identified in the herbaceous layer, *i.e.*, Rough bedstraw (*Galium asprellum*), Reed Canary Grass (*Phalaris arundinacea*), Creeping Charlie (*Glechoma hederacea*), Virginia Waterleaf (*Hydrophyllum virginianum*), Nettle (*Urtica spp.*) and Ragweed (*Ambrosia spp.*), are perennials so their emergence from the ground by April 7, 2011, is not sufficient to conclude the growing season had begun. Nothing on the record indicates the presence of graminoids, bulbs, and corms or coleoptile/cotyledon emergence from seed. Accordingly, we conclude that April 7, 2011, was not within the growing season.

3. Could the date of the field work relative to the growing season have had any impact on the site conditions documented on the data forms?

To the extent possible, the hydrophytic vegetation decision should be based on the plant community that is normally present during the wet portion of the growing season in a normal rainfall year, (*Id.*). However, wetland determinations can and often must be performed at other times of year. The Midwest Region has a seasonal climate, with a cool wet spring, a warmer and drier summer, and a cold, often snowy winter. Vegetation sampling for a wetland determination can be challenging when plants die back in response to seasonal or long-term drought, freezing temperatures, or other factors. At these times, the Midwest manual (*Id.*) states that experience and professional judgment may be required to adapt the vegetation sampling to determine the plant community that is normally present. However, the sample locations were free of snow, ice and no frozen ground was encountered during sampling on April 7, 2011. Live perennial vegetation was present in the herbaceous strata, so that actual observation and identification of the vegetation was accomplished.

We recognize other factors can alter the plant community on a site and affect a hydrophytic vegetation determination, including seasonal changes in species composition, and we would expect that species composition would change to reflect an increase in annual plants later in the year. As such, we would expect the species composition listed on the data forms could very well be different at some other time of the year (this effect would occur regardless of the time of year the observation was made). However, we believe the presence of living, growing, perennial plants which are present throughout the year demonstrates favorable site conditions over a longer period of time than could be gleaned by the presence of annual vegetation, which would be more likely to spread and recede in response to acute site conditions.

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As we believe the established presence of hydrophytic perennials is indicative of normal site conditions, we do not believe that the date of the field work relative to the growing season had any impact on the site conditions that would change our conclusions on the site.

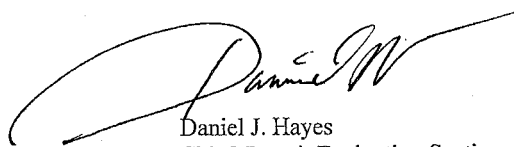
4. At all five sample points, the soil is determined to be hydric based on the presence of the F6 (Redox Dark Surface) hydric soil indicator. However, in F6 if the chroma is 2 or less, it must have 5% or more redox features. Samples #1, #2, and #4 only describe 2% redox, so these samples do not meet F6. Is there an explanation for this error?

Upon further review we concede that the F6 finding for Samples #1, #2, and #4 are unsupported in the record. Instead, the special conditions found at the sampling points should have been used to support our findings. There are several soil situations in the Midwest Region that are considered hydric if additional requirements are met. In some cases, these hydric soils may appear to be non-hydric due to the color of the parent material from which the soils developed. These include fluvial sediments formed within floodplains. These soils commonly occur above the bankfull level of rivers and streams, which is true in this case. In some cases, these soils lack hydric soil indicators due to seasonal or annual deposition of new soil material, low iron or manganese content, and low organic matter content. Soils that are thought to meet the definition of a hydric soil but do not exhibit any of the indicators described in Chapter 3 of the Midwest Manual can still be identified if indicators of hydrophytic vegetation and wetland hydrology are present, but indicators of hydric soil are not evident.

In this case hydrophytic vegetation are present, and two to three primary hydrologic indicators are also present. In addition one secondary indicator of hydrology was present at all of the sites (AR-76-85). The area contains concave surfaces (i.e., forested depressions, oxbows) and is part of an active floodplain on a low terrace. The area is nearly level area (e.g., 0- to 3-percent slope). Sampling sites #1, #2 and #4 are wetlands, although and not because they meet NRCS F6 criteria, rather because they are made up of fluvial sediments within the floodplain (See Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0) *U.S. Army Engineer Research and Development Center 3909 Halls Ferry Road Vicksburg, MS 39180-6199*, August 2010, @ pp. 113-116).

Should you have any questions, please contact me by letter, or telephone me at (309) 794-5372.

Sincerely,



Daniel J. Hayes
Chief, Permit Evaluation Section
Regulatory Branch